REMARKS

Posture of the case

Claims 1-21 were originally presented in the application filed October 23, 2003.

In a preliminary amendment, filed September 12, 2004, claims 1-3, 5-9, 12-17, and 19-21 were amended to correct informalities and dependencies.

In a non-final Office action of March 28, 2007, claims 15-21 were rejected under 35 USC. 101 on grounds that the claimed invention is directed to non-statutory subject matter and claims 1-21 were rejected under 35 USC. 102(b) as being unpatentable over US patent 6,151,643 (Cheng).

In Reply A, filed June 28, 2007, Applicant amended claim 15 to overcome the 101 rejection and submitted amendments and arguments to claims 1, 8 and 15 to overcome the 102(b) rejections.

In a preliminary amendment of August 8, 2007, Applicant canceled all method claims, which were claims 1-7.

On August 20, 2007, a final rejection (the Final Office Action") maintained the prior rejections.

Applicant appealed the rejection in a Notice of Appeal filed November 19, 2007.

The claims appealed, and for which arguments were presented in the Appeal of January 21, 2008, were claims 8, 13, 15 and 20.

Prosecution was reopened in the present, non final Office action of April 9, 2008.

Applicant initiated correction of antecedent basis for the term "post-load images"

Applicant noticed after the previous final Office action that claims 8 and 15 lacked sufficient antecedent basis for their respective first uses of the term "post-load images." Applicant, therefore, submitted an amendment to claims 8 and 15 in a Request for Reconsideration. A responsive Advisory Action elected not to enter the amendment on grounds that it would require further consideration and searches. Applicant subsequently discussed in a telephone interview with Examiner Kumar on November 13, 2007 reasons why the amendment would not require an additional search. Applicant also submitted the amendment and explained these reasons in Applicant's Appeal Brief. In the present Office action, the Examiner disagrees with Applicant's understanding that agreement to enter the

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amendments was reached in the telephone interview. This particular point is now moot, however, since the present Office action provides Applicant an opportunity to resubmit the amendments.

Setting aside whether agreement was previously reached, the amendment has now been discussed in a telephone interview and twice submitted. In spite of this the present Office action neither acknowledges the lack of antecedent basis, nor indicates that the previously submitted amendment has been entered. Applicant respectfully renews the request to enter the amendment to provide proper antecedent basis for the term "post-load images" in claims 8 and 15, which is once again submitted herein.

Prior Art Rejections

Claims 8 and 10-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,151,643 ("Cheng") in view of US 200210158900 A1 ("Hsieh"). Applicant respectfully traverses. Applicant herein amends claims as set out above merely i) to put the claims in better form, i.e., ii) to ensure proper antecedent basis, to eliminate a claim 16, which was previously incorporated into claim 15, and ii) to eliminate a portion of claims 8 and 15 not relied upon to distinguish the invention over the prior art.

The present Office action states on page 11 that "Applicant's arguments filed on January 21, 2008 have been fully considered but were found not persuasive." The present Office action states on page 12 that the previous rejection based on Cheng under 35 U.S.C. 102(b) is "maintained." However, the Office action states in the same sentence that the rejection is now "based on new citation."

Applicant notes that contrary to the above recited statements in the present Office action, Applicant's Appeal Brief of January 21, 2008, has succeeded in producing a new Office action that does not maintain the previous rejections. The present Office action indicates that an additional search has been conducted, which yielded the Hsieh reference, and reopens prosecution based on citation of this new reference in combination with the previously relied upon reference, Cheng. Accordingly, the present Office action rejects all remaining claims under 35 USC 103(a), whereas the prior Office action rejected the claims under 35 U.S.C. 102(b). This clearly indicates that the previous rejection under 35 USC 102(b) has been withdrawn.

Issue 1: Claims 8 and 15

The Office Action, adds the teaching of Hsieh, paragraph 8, to Cheng's teaching at col. 6, lines 31-40, which is about a system for updating diverse software products, for rejecting the claimed "respective post-load images being substantially identical to respective images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target computer system."

However, the cited passage of Cheng merely states, in relevant part, that "Each software vendor computer 103 coupled to the service provider computer 102 stores software update information, software products, information files, and the like. The software update information includes applications, binary files, text files, and the like, for updating software products installed on client computers 101 . . . "Based on the overall context of Cheng, Appellant submits that the cited passage describes is conventional updating done by downloading pre-load images. For example, Cheng col. 3, lines 40-51, discloses the following:

The user selects various software updates for installing on the client computer. Either the client application or the service provider computer then uses the network location specified in the database to connect to the computer system of the software vendor and download the software update from there to the client computer. The client application uses the format information to determine the appropriate installation process associated with the software update, and installs the software update using the proper installation process. During the installation process, the client application monitors all changes made to the client computer, such as the deletion, addition, or alteration of files or directories . . .

That is, the description of the client application installing the software update with an appropriate installation process and the client application monitoring file or directory alterations in this passage indicates that Cheng's disclosed updating is done by downloading and then installing pre-load images.

The relied upon teaching of Cheng teaches what Applicant has acknowledged in the "Background" section of the present application, i.e., software installation by downloading pre-load images, and does not teach that the "software update information, software products, information files, and the like" are "post-load images . . . substantially identical to respective

images resulting on a target computer system hard drive from an installation process of corresponding pre-load images, so that the respective post-load images include software application configuration information, files from the corresponding pre-load images, and links to drivers for hardware of the target computer system," as recited in claim 8 of the present application.

The Office action argues, however, that since Hseih teaches packaging ghost images and automatically disseminating them to all appropriate computers, it would have been obvious at the time of the present invention to combine this teaching of Hseih with that of Cheng to meet the above recited claim limitation. Applicant respectfully disagrees.

With regard to the relied upon passage and its context, Hseih states the following:

[0008] To overcome some of the problems associated with the installation of software on multiple computers, various techniques have been developed which permit software to be automatically deployed to the computers with minimum involvement by humans. However, these techniques are limited in the types of environments in which they can be utilized. For example, in an enterprise where all of the users interact with the same legacy applications, a "cookie cutter" type of approach can be used to deploy the software. In this approach, every computer can have the same, standard set of programs, each with the same configuration. Once the software programs and settings have been determined, they can be packaged in a fixed format, sometimes referred to as a "ghost" or "brick", and automatically disseminated to all of the appropriate computers. Thus, whenever a change is made to the standard configuration, it can be easily distributed to all of the users at once. Similarly, if a particular user experiences a failure, for instance due to a computer virus, the standard package can be readily installed on the user's computer, to restore the original functionality.

[0009] However, this type of automated deployment is not effective for situations in which computers, such as servers, need to be customized to accommodate the individual requirements of varied users. One example of such a situation is a data center which may house the infrastructure for hundreds of different web sites. The hardware and software requirements for these sites will typically vary among each site. For instance, each site will likely have a different business logic associated with it, i.e. the informational content and services associated with a given site will not be the same as those of any other site supported by that data center. These differences may require a combination of hardware and software which is unlike that of any other site. Similarly, different web site developers may employ different platforms for the sites, thereby necessitating various combinations of operating systems and application programs on the servers of the respective sites. Furthermore, different types of equipment may be utilized for the sites, thereby adding to the complexity of the provisioning process. In some cases, the same site may require a variety of different hardware devices, operating systems and application programs to handle all of the different services provided by that site. For an entity that is responsible for managing the varied infrastructure of these sites, such as a data center operator or a third-party infrastructure utility provider, the known approaches to automated software deployment are not adapted to meet the high degree of customization that prevails in these types of situations. Rather, because of the flexibility that is required to accommodate a different configuration of hardware and/or software for each site, manual provisioning is still being practiced to a large extent, with all of its attendant disadvantages.

A careful reading of the context of paragraph 0008 reveals that Hseih teaches post-load images are not suitable for what is claimed in the present case. That is, Hseih, paragraph 0009, states "However, this type of automated deployment is not effective for situations in which computers, such as servers, need to be customized to accommodate the individual requirements of varied users." The present invention, as claimed, is precisely the type of situation referred to by Hseih in this statement disavowing use of ghost images for customizing situations.

As the specification, page 7, of the present application states, "Referring again to FIG. 2, according to one embodiment of the invention, the service provider also sells computers via the Web site 105 and permits purchasers to select and configure software 120 for delivery with the computers using the same browser 115 (FIG. 1) interface. Web site 105 also establishes and maintains a record 250 on server 110 with an order identifier 252 and user identifier 254 commemorating the computer or software order . . . " This is clearly not a situation in which "every computer can have the same, standard set of programs, each with the same configuration," as Hseih, paragraph 8 teaches.

Consistent with this, claim 8 in the present application states, "An apparatus for deploying software, comprising: a processor; a memory for storing program instructions executable by the processor to perform the steps of: providing a Web site on a first computer system coupled to a network for presenting a user with an interface; receiving from the user a selection of software applications for deploying to a target computer system" and "receiving from the user a selection of hardware for the target computer system and responsively determining what drivers correspond to the indicated hardware." (Claim 15 has similar language, according to the form of the invention it claims.)

To even more clearly point out the differences between the present invention and what is taught by Cheng and Hseih, Applicant herein amends claim 8 to recite "An apparatus for deploying software, comprising: a processor; a memory for storing program instructions executable by the processor to perform the steps of: providing a Web site on a first computer system coupled to a network for presenting users, with an interface, wherein the users include purchasers." Claim 15 is similarly amended.

Issue 2: Claims 8 and 15

The Office action relies upon the combination of Hseih, paragraph 8, with Cheng's teaching at col. 6, lines 11-30, which is about a system for updating diverse software products, for the claimed computer system recited in claim 8 that has "an array of pre-built, *post-load images*/ executables stored thereon for combinations of hardware and the software that the user may select" (emphasis added). (Claim 15 has similar language.) However, the cited passage of Cheng merely states the following:

Referring now to FIG. 1, there is shown the architecture of one embodiment of a system for updating diverse software products on user's computers in accordance with the present invention. In system 100, there are a plurality of client computers 101 communicatively coupled by a network 106 to a service provider computer 102. A number of software vendor computers 103 are also communicatively coupled over the network 106 to the service provider computer 102. The network 106 is preferably the Internet, or other similar wide area network.

Each client computer 101 is operated by an end user, and typically has a number of software products installed thereon, such as applications, drivers, utilities and the like. In accordance with the present invention, the client computers 101 includes a client application 104 that communicates with the service provider computer 102 to obtain software updates of software products installed on the client computer 101. The software architecture of a client computer 101 and client application 104 is further described below with respect to FIG. 7.

While this describes client computers 101 coupled to software vendor computers 103 and describes that the client computers 101 have applications and drivers on them, it does not teach "an pre-built array of post-load images" stored on a service provider's computer "for combinations of hardware and the software that the user may select," as recited in amended claim 8. And Hseih, likewise, does not teach or suggest "a pre-built array of post-load images" stored on a service provider's computer "for combinations of hardware and the software that the user may select."

The Office action relies upon the combination of Hseih, paragraph 8, with Cheng's teaching at col. 7, lines 62-64 and FIG. 4, which is about displaying the list of applicable software, for rejecting the claimed "selecting a certain one of the pre-built images by the first computer system responsive to the received user selections, wherein the selected image has the software applications selected by the user and the drivers for the hardware selected by the user."

However, the cited passage of Cheng merely states the following:

The client application 104 displays 206 the list of applicable software updates to the user, for review and selection thereof of updates for purchase and installation. FIG. 4 illustrates a sample user interface display 400 of applicable software updates.

Even in combination with the teaching of Hseih, this does not teach or suggest "pre-built images" where the pre-built images are limited as recited in amended claim 8 and discussed herein above, i.e., pre-built, post-load images.

Issue 3: Dependent claims 13 and 20

The Office action relies upon the combination of Hseih, paragraph 8, with Cheng's teaching at col. 7, lines 64-66 and FIG's 2 and 4, which is about software updates, for rejecting the claimed "presenting, responsive to the user or order identifier, a list of suggested software programs for the second order in addition to those of the first order" (emphasis added). That is, the cited passage from Cheng is in the context of a preceding statement, at Cheng, col. 7, lines 40-57, "The client application 104 then analyzes 204 the client computer 101 to determine a list of installed software products. . . . For each of the installed software products on the list, the client application 104 determines 205 if there is an applicable, or relevant update for the software product." And the cited passage at col. 7, lines 64-66, states "The client application 104 displays 206 the list of applicable software updates to the user, for review and selection thereof of updates for purchase and installation. FIG. 4 illustrates a sample user interface display 400 of applicable software updates. This display 400 includes the name 401 of each software product identified on the client computer 101 . . ."

In contrast, claim 8 recites "receiving a first order from the user for the certain image of the selected software applications." Then claim 13, which depends on claim 8, recites "presenting . . . a list of suggested software programs for the second order in addition to those of the first order" (emphasis added). Applicant submits that a "list of suggested software programs" for a second order that "is in addition to those of the first order," which was "a selection of software applications" that were "receiv[ed] from the user," as recited in claims 8 and 13 of the present application, is not made obvious by teaching of Cheng about "determin[ing] a list of installed software products" and "For each of the installed software

products on the list . . . display[ing] 206 . . . applicable software updates to the user," even if combined with the teaching of Hseih.

The present Office action now particularly points out that it is significant this passage of Cheng teaches a sample user display of applicable software updates in which a first order (i.e. "Quicken 5.0") and a second order (i.e., "Update from 5.0 to 5.0F") are displayed side-by-side. However, this merely serves to reinforce Applicant's distinction. That is, in the claims of the present application a clear distinction is made between "updates" and "programs." That is, claim 12 in the present application recites "presenting . . . a list of suggested updates for the software programs of the first order" (emphasis added). In order to give full weight to all the words of the claims, the term "software program" must be construed as different from "software updates." See, for example, Robert C. Kahrl, "Patent Claim Construction," Aspen Publishers, 2007, 4.03[F] (quoting from Comark Communications Inc. v. Harris Corp., 156 F. 3d 1182, 48 USPQ2d 1101, 1105 (Fed. Cir. 1998)). Consequently, "suggested software programs . . . in addition to those of the first order," as recited in claim 13, are not "software updates," as recited by claim 12 and taught by Cheng. However, the Final Office Action conflates the two. See Office action, page 8, last paragraph (misquoting claim 13 (and, by reference, claim 20) by reciting "a list of suggested updates for the software programs.").

REQUEST FOR ACTION

For the above reasons, Applicant contends the invention defined in independent claims 8 and 15 is patentably distinct and that dependent claims 10-14 and 17-20 are allowable at least because they depend upon respectively allowable independent claims 8 or 15. In addition, Applicant contends that the inventions defined in dependent claims 13 and 20 are also further patentably distinct for the above reasons. Applicant requests that the Examiner grant allowance and prompt passage of the application to issuance.

Respectfully submitted,

Anthony V.S. England

Registration No. 35,129

Attorney of Record for